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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,419	12/26/2001	Kenji Kawano	04329.2718	2486

7590 03/29/2004

Finnegan, Henderson, Farabow,  
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Washington, DC 20005-3315

EXAMINER

CHACKO DAVIS, DABORAH

ART UNIT	PAPER NUMBER
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1756

DATE MAILED: 03/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/026,419	<b>Applicant(s)</b> KAWANO ET AL.	
	<b>Examiner</b> Daborah Chacko-Davis	<b>Art Unit</b> 1756	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-85 is/are pending in the application.
- 4a) Of the above claim(s) 15-85 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/2001</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election without traverse of Group I, claims 1-14, in Paper No. is acknowledged.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-7, are rejected under 35 U.S.C. 103(a) as being unpatentable over U. S. Patent No. 6,644,964 (Shirakawa et al) in view of U. S. Patent No. 5,434,644 (Kitano et al).

Shirakawa, in col 1, lines 45-55, in col 2, lines 47-52, in col 4, lines 47-53, in col 9, lines 29-54, in col 12, lines 54-67, and in figures 8A, and 8B, discloses a heating apparatus comprising a chamber (reference 440), a heating plate for heating a substrate, wherein the heating plate includes a support surface to support the film coated substrate (reference W); a partition member (absorption plate, second plate portion, reference 221) that has a plurality of openings (pores) is positioned facing the support surface of the heating plate, and a supply port that supplies gas (nitrogen) to a lower portion through the openings in the second plate, wherein the gas stream passes through the area above and below the wafer surface (while being heated) and exhausts (the gas stream, and air within the chamber) through the exhaust port (reference 243)

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(claims 1, 5-6). Shirakawa, in col 2, lines 46-54, discloses that the partition member (plate) is detachably disposed in the apparatus (claim 2). Shirakawa, in col 9, lines 15-36, discloses that the second plate portion is porous (has openings) and comprise ceramic materials (claims 3, and 7). Shirakawa, in col 13, lines 5-7, discloses that the openings of the plate portions are within 0.3mm (claim 4).

The difference between the claims and Shirakawa is that Shirakawa does not disclose that the gas stream emanating from the partition member (adsorption plate, plate portion) discharges the substances evaporated from the film (along with the gas) through the exhaust port.

Kitano, in Kitano, in col 2, lines 43-52, in col 4, lines 28-40, and in col 5, lines 65-68, and in col 6, lines 1-2, discloses the use of a filter unit (partition member) in a processing station, wherein the filter unit absorbs the unwanted substances (such as alkali) and exhausts the substances through the outlets and prevents it from reaching the film surface.

Therefore, it would be obvious to a skilled artisan to modify Shirakawa by employing the filter unit suggested by Kitano because Kitano, in col 5, lines 60-64, discloses that employing such filters enables the developments of film patterns with high accuracy.

***Allowable Subject Matter***

4. Claims 8-14, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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**Conclusion**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daborah Chacko-Davis whose telephone number is (571) 272-1380. The examiner can normally be reached on M-F 9:30 - 6:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark F Huff can be reached on (571) 272-1385. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

dcd

March 18, 2004.

A handwritten signature in black ink, appearing to read "Mark F. Huff", with a long, sweeping horizontal line extending to the right.

MARK F. HUFF  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700